

PRODUCT DATA SHEET

Avery Dennison® Exterior Dual Reflective Solar Films

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Revision: 4

Introduction

DR Grey X films combine a high performance, high privacy exterior with a low reflective interior appearance. This ensures maximum heat rejection, energy efficiency and privacy, with the advantage of clear views out day and night, and pleasant indoor ambiance.

Description

Color: in: neutral black-grey; out: silver reflective
Technology: Vacuum metal deposition + Nanotechnology
Face:
DR Grey 10X
DR Grey 20X
DR Grey 35X
DR Grey 50X

Adhesive: Pressure sensitive **Permanent** – Solvent based acrylic
Liner: PET

Warranted Durability¹:	DR Grey 10X	DR Grey 20X	DR Grey 35X	DR Grey 50X
Vertical	5 years	5 years	5 years	4 years
Horizontal/ Sloped	3 years	3 years	3 years	2 years

Fire Certification: B-s1, d0 (DIN EN 13501-1)

Features:

- **Energy Efficient:** Exceptional energy saving, reducing need for air-conditioning
- **Dual Reflective:** Transforms and unifies building's exterior and pleasant interior ambiance
- **Rejection:** Excellent heat and glare rejection

Common Applications:

DR Grey 10X, 20X, 35X and 50X were developed for external use on vertical architectural glass in commercial, residential and public sector. The films are compatible with high-end glazing systems, enhancing the performance of even the most sophisticated glass units, and upgrading the building's appearance.

PRODUCT CHARACTERISTICS

Avery Dennison® Exterior Dual Reflective Solar Films

Optical & Solar Properties:

	DR Grey 10X		DR Grey 20X		DR Grey 35X		DR Grey 50X	
	Single Pane	Double Pane	Single Pane	Double Pane	Single Pane	Double Pane	Single Pane	Double Pane
Visible Light Transmitted %	8	7	19	18	36	32	53	48
Visible Light Reflected (Int) %	17	23	14	21	14	21	19	25
Visible Light Reflected (Ext) %	55	55	34	35	22	23	18	21
U V Block %	99	99	99	99	99	99	99	99
Total Solar Energy Reflected %	58	58	38	38	26	27	22	24
Total Solar Energy Transmitted %	7	6	18	15	31	26	40	35
Total Solar Energy Absorbed %	35	36	45	47	44	47	38	41
Shading Coefficient	0,20	0,14	0,36	0,27	0,50	0,40	0,59	0,49
Total Solar Energy Rejected %	83	88	69	77	57	65	49	58
Solar Heat Gain Coefficient	0,17	0,12	0,31	0,23	0,43	0,35	0,51	0,42
Emissivity (Room side)	0,84	0,84	0,84	0,84	0,84	0,84	0,84	0,84
U-Value Winter	1,04	0,48	1,04	0,48	1,04	0,48	1,04	0,48
K-Value Winter	5,91	2,73	5,91	2,73	5,91	2,73	5,91	2,73
Glare Reduction %	91	91	79	78	61	61	41	41
Luminous Efficacy	0,40	0,50	0,54	0,66	0,70	0,80	0,89	0,98

Important

Information on physical and chemical characteristics is based upon tests we believe to be reliable. The values listed herein are typical values and are not for use in specifications. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use.

All technical data are subject to change without notice.

Warranty

All Avery Dennison statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that purchaser has independently determined the suitability of such products for its purposes. All Avery Dennison's products are sold subject to Avery Dennison's general terms and conditions of sale, see <http://terms.europe.averydennison.com>

1) Warranted Durability

The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased. With regard to Avery Dennison Architectural Window Film Products, the durability shall no differ between the climatic zones, but the same durability shall apply to all climatic zones.